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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/589,108 HUS ET AL. Office Action Summary Examiner Art Unit

	AJAT F. CATTONGAL 2419				
7 Period for R	The MAILING DATE of this communication appears on the cover sheet with the correspondence a Reply	ddress			
WHICHE - Extension after SIX - If NO per - Failure to Any reply	RTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY ( EVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  In of time may be available under the provisions of 3'CFR 1.756(a), in no event, however, may a ruply be timely filed  when the provision of the provision of 3'CFR 1.756(a) in no event, however, may a ruply be timely filed  riply of the provision of the provisi	,			
Status					
1)⊠ R∈	esponsive to communication(s) filed on 29 January 2009.				
	his action is FINAL. 2b)⊠ This action is non-final.				
	ince this application is in condition for allowance except for formal matters, prosecution as to the osed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.	ie merits is			
Disposition	ı of Claims				
4)⊠ Cla	laim(s) <u>1-11</u> is/are pending in the application.				
4a) Of the above claim(s) is/are withdrawn from consideration.					
5)□ Cla	laim(s) is/are allowed.				
6)⊠ Cla	laim(s) <u>1-11</u> is/are rejected.				
	laim(s) is/are objected to.				
8)∐ Cla	laim(s) are subject to restriction and/or election requirement.				
Application	1 Papers				
9)□ The	ne specification is objected to by the Examiner.				
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
	pplicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
_	eplacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 0 ne oath or declaration is objected to by the Examiner. Note the attached Office Action or form F				
Priority und	der 35 U.S.C. § 119				
	knowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). All b)☐ Some * c)☐ None of:				
1.[	Certified copies of the priority documents have been received.				
_	Certified copies of the priority documents have been received in Application No				
3.[	Copies of the certified copies of the priority documents have been received in this National	ıl Stage			
* 0	application from the International Bureau (PCT Rule 17.2(a)).				
- See	e the attached detailed Office action for a list of the certified copies not received.				
Attachment(s)	)				
1) Notice of	of References Cited (PTO-892)  4) Interview Summary (PTO-413)				

- Notice of Draftsperson's Patent Drawing Review (PTO-948)
   Information Disclosure Statement(s) (PTO/SE/08) Paper No(s)/Mail Date \_\_\_\_\_
- Paper No(s)/Mail Date. \_\_\_\_\_\_5 6) Other: \_\_\_\_

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

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### DETAILED ACTION

This office action has been examined. Claims 1-11 are pending.

### Claim Rejections - 35 USC § 112

2. Claims 1- 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding claim 1, Para 23, Para 38, Para 41 lines 11-15. Para 61 and Para 67 teaches of transmitting an indication of the identity of the second station. The specification does not teach transmitting the indication of the identity of the "further signal". The identity of the "further signal" would not be sufficient data to complete the retransmission of data to the second station. In order to retransmit in a dedicated mode the identity of the "second station" is needed instead of the identity of the "further signal". Regarding claim 7. Para 23. Para 38, Para 41 lines 11-15, Para 61 and Para 67 teaches of transmitting an indication of the identity of the second station. The specification does not teach receiving the indication of the identity of the "further signal". The identity of the "further signal" would not be sufficient data to complete the retransmission of data to the second station. In order to retransmit in a dedicated mode the identity of the "second station" is needed instead of the identity of the "further signal". Regarding claim 9, Para 23, Para 38, Para 41 lines 11-15, Para 61 and Para 67 teaches of transmitting an indication of the identity of the second station. The specification does Application/Control Number: 10/589,108 Page 3

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not teach retransmitting the identity of the "signal". The identity of the "signal" would not be sufficient data to complete the retransmission of data to the second station. In order to retransmit in a dedicated mode the identity of the "second station" is needed instead of the identity of the "signal". It confusing cause in claim 9 teaches of a "means responsive to receiving a further signal for transmitting an *indication of identity of the communication station*" and then it teaches " where an *identity of a signal is retransmitted* for further processing only if the dedicated mode was selected"

## Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary sikl lin the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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 Claims 1, 2, 5, 7, 8, 9, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohkubo et al. (20030012195) in view of Rajahalme (20030007499) and in further view of Grauel et al. (4,815,073).

Re claim 1. Ohkubo et al. discloses a method of operating a multicast transmission system (See fig 1) comprising a first station (Fig 1 item 1 for example Base station); and a plurality of second stations (Fig 1 item 11 for example Mobile station and claim 1, plurality of mobile stations), the method comprising at the first station, transmitting data(Fig 1 item 4 for example Transmitter); at each of the second stations, receiving the data(Fig 1 item 15 for example Receiver); determining whether the received data is fully decodable(Fig 1 item 13 for example Error detection /ARQ Processor); if the data is not fully decodable, transmitting a reply signal(Fig 1 item 14 for example Transmitter); and at the first station receiving (Fig 1 item 5 for example Receiver) the reply signal from at least one of the second stations, and in response to receiving the reply signal, retransmitting at least a portion of the data; further comprising the reply signal being devoid of an indication of the identity of the transmitting second station( paragraph 23, teaches that the mobile station uses spreading code as the retransmission request signal. Spreading code is devoid of an indication of the identity of the transmitting station, instead it uses the identity of the first station to send a reply signal.); Ohkubo et al does not explicitly disclose, at the first station selecting a method for retransmitting the data, between a dedicated mode in which the data is addressed to one of the second stations and a broadcast mode in which the data is broadcast to a plurality of the

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second stations; in response to selecting the dedicated mode and prior to the retransmission, transmitting a further signal; at each of the second stations which transmitted the reply signal, in response to receiving the further signal, transmitting an indication of its identity; and at the first station, receiving the indication of identity and employing the indication of identity to address the retransmission to one of the second stations.. However, Rajahalme et al. teaches, at the first station, selecting a method for retransmitting the data, between a dedicated mode(See Fig 2, 2-6) in which the data is addressed to one of the second stations and a broadcast mode in which the data is broadcast to a plurality of the second stations (See Fig 2, 2-4). And Grauel et al. teaches in response to selecting the dedicated mode and prior to the retransmission, transmitting a further signal; at each of the second stations which transmitted the reply signal, in response to receiving the further signal, transmitting an indication of its identity; and at the first station, receiving the indication of identity and employing the indication of identity to address the retransmission to one of the second stations (Col 4 lines 54-61). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the mode selection method by Rajahalme et al. with the obtaining of identification method of Grauel et al. with the multicasting method by Ohkubo et al. in order decongest the bandwidth.

Re claim 2, Note that Rajahalme et al. discloses a method comprising estimating the number of second stations transmitting the reply signal and selecting the mode dependent on the estimate( see paragraph 16. line 1-4 and 17, line 1-3).

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Re claim 5, Note that Ohkubo et al. discloses a method wherein the further signal comprises a positive acknowledgement ( see paragraph 23 line 1, where Ohkubo et al teaches a spreading code is used as a retransmission request signal. A Spreading code method utilizes transmitting data in data packets. The user equipment acknowledges the reception of data packet with an Ack or a Nack signal  $\Delta t$  time after the transmission).

Re claim 7. Ohkubo et al. discloses a communication station for use in a multicast transmission system comprising a plurality of second stations (see Fig 1) the communication station comprising; means for transmitting data (See Fig 1 item 4 for example Transmitter); means for receiving a reply signal (See Fig 1 item 5 for example Receiver) from at least one of the second stations, means responsive to receiving the reply signal for retransmitting at least a portion of the data, the reply signal being devoid of an indication of an identity of the second stations (paragraph 23, teaches that the mobile station uses spreading code as the retransmission request signal. Spreading code is devoid of an indication of the identity of the transmitting station, instead it uses the identity of the first station to send a reply signal.); a means responsive to selecting the dedicated mode for transmitting a further signal for further processing(See Fig 1 item 4 for example Transmitter); means for receiving an indication of identity of the further signal only for the further processing (See Fig 1 item 5 for example Receiver) Ohkubo et al. does not explicitly disclose a means for selecting, for retransmitting the data, between a dedicated mode in which the data is addressed to one of the second stations and a broadcast mode in which the data is broadcast to a plurality of the

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second stations and means for employing the indication of identity to address the retransmission to one of the second stations (See Fig 1 item 3 for example ARQ Processor).. However, Rajahalme et al teaches about a means for selecting, for retransmitting the data, between a dedicated mode(See Fig 2, 2-6) in which the data is addressed to one of the second stations and a broadcast mode in which the data is broadcast to a plurality of the second stations (See Fig 2, 2-4). and Grauel et al. teaches means for employing the indication of identity to address the retransmission to one of the second stations (Col 6 lines 54-61). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the mode selection system by Rajahalme et al. with the obtaining of identification method of Grauel et al with the multicasting system by Ohkubo et al. in order to decongest the

Re claim 8, note that Rajahalme et al. discloses communication station, wherein the means for selecting the mode is adapted to estimate the number of second stations transmitting the reply signal and to select the mode dependent on the estimate(see paragraph 16, line 1-4 and 17, line 1-3).

Re claim 9, Ohkubo et al. discloses a communication station for use in a multicast transmission system, the communication station comprising: means for receiving data (See Fig 1 item 15); means for determining whether the received data is fully decodable (See Fig 1 item 13); and means responsive to the data not being fully decodable for transmitting a reply signal devoid of an indication of identity of the communication station ( paragraph 23, teaches that the mobile station uses spreading

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code as the retransmission request signal. Spreading code is devoid of an indication of the identity of the transmitting station, instead it uses the identity of the first station to send a reply signal.); and means responsive to receiving a further signal for transmitting an indication of identity of the communication station (See fig 1 item 14); means for receiving a retransmission of at least a portion of the data whether addressed to the communication station or whether broadcast (See Fig 1 item 13). Ohkubo et al does not explicitly disclose transmitting the indication of the identity of the communication station. However Grauel et al. discloses a method for transmitting the indication of the identity of the communication station (Col 6 lines 54-61). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the obtaining of identification method of Grauel et al with the multicasting system by Ohkubo et al. in order to decongest the bandwidth.

Re Claim 11, Note that Ohkubo et al. discloses a multicast transmission system comprising a first station in accordance claim 7 and a plurality of second stations (see paragraph 17).

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over
 Ohkubo et al. (20030012195) in view of Rajahalme(20030007499) and in further
 view of Grauel et al. (4, 815,073) as applied to claim 1 above and further in view of
 Dent et al (5771288).

Re claim 3 Ohkubo et al. in view of Rajahalme modified by Grauel et al. discloses the claimed invention as set forth in claim 1 above. Ohkubo et al. in view of Rajahalme modified by Grauel et al. does not explicitly disclose a method wherein the reply signal

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is transmitted in an access slot indicative of a portion of data to be retransmitted. However Dent et al teaches, a method wherein the reply signal is transmitted in an access slot (Time slot) indicative of a portion of data (information signal) to be retransmitted (see column 1, paragraph 6, line 1-3. and Column 3, paragraphs 1, line 2-4 under Summary). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to use the method by Dent et al. with the method by Ohkubo et al. in view of Rajahalme modified by Grauel et al. in order to decongest the bandwidth.

Re claim 4, Ohkubo et al. in view of Rajahalme modified by Grauel et al. discloses the claimed invention as set forth in claim 1 above. Ohkubo et al. in view of Rajahalme modified by Grauel et al. does not explicitly disclose a method wherein the reply signal comprises a signature indicative of a portion of data to be retransmitted. However Dent et al. teaches a method wherein the reply signal comprises a signature indicative of a portion of data (information signal) to be retransmitted (see column 3, paragraphs 1, and line 2-4 under Summary). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to use the method by Dent et al. with the method by Ohkubo et al. in view of Rajahalme modified by Grauel et al. in order to decongest the bandwidth.

 Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohkubo et al.(20030012195) in view of Rajahalme (20030007499) and in further view of Grauel et al. (4, 815,073) as applied to claim 1 above, and further in view of Choi et al. (20010053140).

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Re claim 6, Ohkubo et al. in view of Rajahalme modified by Grauel et al. substantially discloses the claimed invention as set forth in claim 1 above. Ohkubo et al. in view of Rajahalme modified by Grauel et al. does not explicitly disclose a method wherein the transmitted indication of identity comprises a message transmitted on a random access channel having an access service class (ASC) different from the ASC of the reply signal. However Choi et al. discloses a method wherein the transmitted indication of identity comprises a message transmitted on a random access channel having an access service class (ASC) different from the ASC of the reply signal (See paragraph 6). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to use the method by Choi et al. with the method by Ohkubo et al. in view of Rajahalme modified by Grauel et al. in order to decongest the bandwidth.

 Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohkubo et al. (20030012195) in view of Grauel et al. (4,815,073) as applied to claim 9 above in further view of Dent et al. (5771288)

Re claim 10, Ohkubo et al. in view of Grauel et al. discloses the claimed invention as set forth in claim 9 above. Ohkubo et al. in view of Grauel et al. does not explicitly disclose a communication station, wherein the means for transmitting the reply signal is adapted to indicate a portion of the data for which retransmission is requested by selection from a plurality of at least one of a time slot and a signature. However Dent et al. teaches a communication station, wherein the means for transmitting the reply signal is adapted to indicate a portion of the data for which retransmission is requested

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by selection from a plurality of at least one of a time slot and a signature. (Column 1, paragraph 6, line 1-3 and column 3, paragraphs 1, line 2-4). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to use the system by Dent et al. with the multicasting system by Ohkubo et al. in view of Grauel et al. in order to decongest the bandwidth.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AJAY P. CATTUNGAL whose telephone number is (571)270-7525. The examiner can normally be reached on Monday- Friday 7:30 - 5:00, Alternating Fridays OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/A. P. C./ Examiner, Art Unit 2419

/DANG T TON/ Supervisory Patent Examiner, Art Unit 2419/D. T. T./ Supervisory Patent Examiner, Art Unit 2419